

Patent Claims

1. Vaccine containing one or more synthetic or highly purified natural peptides or proteins as antigen(s) as well as one or more adjuvants, characterised in that it is present as a solution or emulsion which is free from inorganic salt ions or has a low concentration of inorganic ions.
2. Vaccine according to claim 1, characterised in that it is substantially free from sodium and chloride and/or free from phosphate ions.
3. Vaccine according to claim 1, characterised in that it is substantially free from all inorganic salt ions.
4. Vaccine according to one of the preceding claims, characterised in that it contains one or more water-soluble or water-emulsifiable substances which are capable of making the vaccine isotonic and increasing their immunogenic activity.
5. Vaccine according to claim 4, characterised in that the isotonic-making substance is selected from among the group carbohydrates, polyhydric alcohols, amino acids or lipids.
6. Vaccine according to claim 5, characterised in that the isotonic-making substance is a sugar.
7. Vaccine according to claim 5, characterised in that the isotonic-making substance is a sugar alcohol.

8. Vaccine according to claim 7, characterised in that the sugar alcohol is sorbitol.
9. Vaccine according to one of claims 4 to 8, characterised in that the isotonic-making substance is present in a concentration such that the resulting solution is isotonic or slightly hypotonic.
10. Vaccine according to claim 9, characterised in that the concentrations of sugar or sugar alcohol are in the range from about 200 - 400 mM.
11. Vaccine according to claim 10, characterised in that the concentration is 250 - 300 mM.
12. Vaccine according to one of claims 1 to 11, characterised in that it additionally contains a buffer.
13. Vaccine according to one of claims 1 to 12, characterised in that it contains a peptide as the antigen.
14. Vaccine according to claim 13, characterised in that the peptide is derived from a tumour antigen.
15. Vaccine according to one of claims 1 to 14, characterised in that it contains a polycation as the adjuvant.
16. Vaccine according to claim 15, characterised in that it contains polyarginine as the adjuvant.

add A1

add B5